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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,354	02/21/2002	Hongyong Zhang	740756-2440	5936

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EXAMINER

LEE, HSIEN MING

ART UNIT PAPER NUMBER

2823

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/078,354

Applicant(s)

ZHANG, HONGYONG

Examiner

Hsien-Ming Lee

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) 1,2,4,6,9,14,17,20 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 21 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/089,650.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 6) ☐ Other:

DETAILED ACTION

Drawings

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: on page 2, at line 18, "source [22]" should be -- source 22--; at line 19, "drain [23]" should be -- drain 23 --; and at line 20, "gate contact [27]" should be -- gate contact 27 -- for keeping consistency.

A brief description to Figure 5 is missing on page 6. Furthermore, a data of "CROSS RELATED REFERENCES" is missing since the present application is a DIV of 08/089,650 (US Patent No. 6,458,200). Appropriate correction is required.

Claim Objections

3. Claims 1, 2, 4, 6, 9, 14, 17, 20 and 22 are objected to because of the following informalities: in-consistent claimed terminologies. In claim 1, at line 3, "crystallizing said non-single crystal semiconductor layer by irradiating said layer" should be -- crystallizing said *first* non-single crystal semiconductor layer by irradiating said *first non-single crystal semiconductor* layer --; at line 6, "crystallized semiconductor layer" should be -- *first* crystallized semiconductor layer; and at lines 9-10, "said second semiconductor layer" should be -- said second *non-single crystal* semiconductor layer --. (Emphasis added) The same suggestion also apply to claim 2, lines 1-2; claim 4, line 1 and claim 6, line 1.

Art Unit: 2823

Furthermore, claim 9, at line 9, "said semiconductor layer" should be -- said *second* semiconductor layer --.

Claim 14, at lines 4-5; claim 17, at lines 4-5; claim 20, at lines 4-5 and claim 22, at line 5, "by irradiating said film" should be -- by irradiating said *non-single crystalline semiconductor* film --.

Claim 22, at lines 5 and 7, "said semiconductor film" should be -- said *non-single crystalline* semiconductor film --. Appropriate correction is required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-7, 9, 11, 12, 14, 16, 17, 19, 20 and 22 of are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 9, 10, 11, 15, 16, 17 and 18 of U.S. Patent No. 6,458,200. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the Patent and the present application are claiming common subject matter regardless some obvious variations, wherein obvious variations refer to "excimer laser light" (the Patent, claim 1, line 6; claim 9, line 8; claim 10, line 6) versus "a laser light" (the application, claim 1, line 4; claim 9, line 7; claim 11, line 5

Art Unit: 2823

and claim 14, line 5); and to "a channel region therein in the form of an island" (the Patent, claim 15, lines 4-5; claim 16, lines 4-5) versus "a channel region therein" (the application, claim 14, lines 2-3; claim 17, lines 2-3).

In particular, the subject matter as recited in claims 1-7, 9, 10, 11, 15, 16, 17 and 18 of the Patent are equivalent to that of claims 1-7, 9, 11, 12, 14, 17, 20 and 22 of the present application, respectively. In addition, the subject matter as recited in claims 16 and 19 of the application is equivalent to that of claim 13 of the Patent.

6. Claims 8, 10, 13, 15, 18, 21 and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 9, 10, 11, 15, 16, 17 and 18 of U.S. Patent No. 6,458,200 in view of US Patent No. 5,424,244.

In re claims 8, 10, 13, 15, 18, 21 and 23, U.S. Patent No. 6,458,200 claims the same common subject matter but does not claim that the laser light is pulsed. However, the pulsed laser light has been widely used to crystallize non-single crystalline semiconductor film, as evidenced by US 5,424,244.

Therefore, it would have been obvious to one of the ordinary skill in the art, at the time the invention was made, to utilize the pulsed laser as the light source as taught by US 5,424,244 in the method of Patent No. 6,458,200 since by utilizing the pulsed laser it would provide a quick heating and cooling approach to the non-single crystalline semiconductor film during the crystallization, which, in turn would prevent the semiconductor film from undesirable melting. (col. 3, lines 1-19, US 5,424,244)

Art Unit: 2823

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hsien-Ming Lee whose telephone number is 703-305-7341. The examiner can normally be reached on M-F (9:00 ~ 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hsien-Ming Lee
Examiner
Art Unit 2823



April 15, 2003